

Abstract

Deductive Object-Oriented Data Mining System (Doodms) is a predictive data mining system. Its goal is generating prediction rules from given databases or any given data sets. In Doodms, the difficult data mining problem is reduced to a series of probability problems, each of which is not only much easier to be solved but also has much better mathematical basis. The generate-count-and-test methodology, which contains generate, count, and test processes, is applied in Doodms. Since it is object-oriented, each instance is treated as an object. Since it is deductive, the generate-process is from more general cases to less general cases. Since an important theorem is proved and applied, the data mining process is greatly sped up. Since no heuristics are applied, the generated results are mathematical rigorous and the tolerance for each case can be set by the user.